1. INTRODUCTION AND BACKGROUND

1.1 Introduction

The Idaho National Engineering and Environmental Laboratory (INEEL) stores a variety of radioactive materials, most resulting from national defense programs. In line with its responsibility to manage and dispose of radioactive wastes in an environmentally sound manner, the U.S. Department of Energy (DOE) proposes to construct and operate a facility called the Advanced Mixed Waste Treatment Project (AMWTP) to treat low-level mixed waste (LLMW), alpha-contaminated LLMW (alpha LLMW), and transuranic (TRU) waste at INEEL. The waste would be treated by technologies proposed by BNFL Inc. (BNFL), the owner and operator of the proposed facility. Currently proposed technologies are supercompaction, macroencapsulation, incineration, and vitrification. After treatment[1], TRU waste would be disposed of at the Waste Isolation Pilot Plant (WIPP) near Carlsbad, NM. LLMW would be disposed of at an approved facility, depending on decisions DOE will make based on evaluations in the *Final Waste Management Programmatic Environmental Impact Statement* (WM PEIS).

1.2 Radioactive Waste at the Idaho National Engineering and Environmental Laboratory

1.2.1 Waste Types

DOE currently stores approximately 65,000 cubic meters of radioactive waste at the Radioactive Waste Management Complex (RWMC) at INEEL. Of this amount, about 25,000 cubic meters are alpha LLMW and about 40,000 cubic meters are TRU waste (see Appendix D, Glossary, for definition of terms). Initially, the alpha LLMW was considered and managed as TRU waste. In 1984, TRU waste was defined as waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes. That change meant that INEEL wastes which are physically intermingled are subject to different treatment, disposal, and waste acceptance criteria (WAC) based on the level of radioactivity. However, because the alpha LLMW is not segregated from the TRU waste in the storage containers, the INEEL has managed all of the approximately 65,000 cubic meters as TRU waste. Approximately 95 percent of this waste is classified as "mixed waste" because it contains chemical wastes which, under the *Resource Conservation and Recovery Act* (RCRA), are considered hazardous. When a waste material is both "hazardous" under RCRA and radioactive it is referred to as a mixed waste. Some of these wastes also contain polychlorinated biphenyls (PCBs), which are regulated under the *Toxic Substances Control Act* (TSCA). Most of this 65,000 cubic meters of waste resulted from nuclear weapons production operations at the Rocky Flats Plant in Colorado and was transported to the INEEL before the current definition of TRU waste was established (prior to 1984).

1.2.2 Volumes Analyzed

A summary of the INEEL waste volumes by waste categories that are being considered for treatment at the proposed AMWTP currently stored at the RWMC is presented in Table 1.2-1. A more detailed description can be found in Appendix F.

[1] The RCRA definition of treatment includes repackaging. Throughout this document the phrase "treatment and repackaging" may be used for clarity.

Table 1.2-1. Summary of mixed waste volume by waste category.[a]

Waste category	Volume (cubic meters)
Ceramic/Brick Debris	290
Graphite	490
Heterogeneous Debris	3,655
Heterogeneous Debris and Mixed Debris	165
Inorganic Debris	4,930
Inorganic Homogeneous Solids	8,570
Metal Debris	15,835
Metal Debris and Heterogeneous Debris	80
Organic Debris	800
Organic Homogeneous Solids	1,695
Paper/Rags/Plastic/Rubber	14,480
Remote Handled	135
Soils	250
Special Case Waste	80
To Be Determined	6,275
Total	57,230

[a.] The sum of the waste in this table is less than 65,000 m^3 because: 1) this list includes only mixed waste (hazardous and radioactive) and therefore does not include waste to be treated that is radioactive only; and 2) 65,000 m^3 is an estimate from 1988 that was developed before the inventory included in Appendix F was available.

1.2.3 Condition of Waste at the Idaho National Engineering and Environmental Laboratory

The approximately 65,000 cubic meters of INEEL waste described above is LLMW, alpha LLMW, and TRU waste which is stored at the RWMC. Of this amount, approximately 52,000 cubic meters of the waste described in Section 1.2.1 at the INEEL (80 percent) is in wooden boxes and metal drums that were stacked on an asphalt pad and covered with tarps, plywood, and then soil to form an earthen berm. The earthen-covered berm is enclosed within a metal building called the Transuranic Storage Area Retrieval Enclosure (TSA RE), a RCRA interim status facility. Approximately 13,000 cubic meters of the waste (the other 20 percent) are stored in adjacent RCRA-permitted facilities at the RWMC. The drums and boxes were not designed for, or intended to provide, permanent containment of the waste. The wastes have been in the earthen berm since 1970; the expected design life of the containers was 20 years. The drums and boxes within the earthen berm are aging and subject to breaching and failure through corrosion or decomposition, which results in the potential for the wastes to be released into the environment.

1.2.4 Additional Quantities of Waste

An additional 120,000 cubic meters of similar waste from the INEEL and other DOE sites could be treated and packaged at the proposed AMWTP facility. The INEEL Site Treatment Plant (STP) currently identifies over 65 waste streams totaling approximately 1,000 cubic meters from 14 other DOE sites that could be treated at the AMWTP. Other potential sources of waste are: the INEEL Environmental Restoration Program (approximately 60,000 cubic meters of waste is buried in the RWMC pits and

trenches); waste from future processing of INEEL high level waste (possibly several hundred cubic meters); INEEL decontamination and decommissioning program waste; LLMW that continues to be generated at INEEL; and similar wastes from other DOE sites. All of this DOE waste must meet the AMWTP WAC described in Appendix F before it can be treated at AMWTP, and the offsite waste must satisfy the requirements of the STP Consent Order.

1.3 Background

A number of regulatory requirements, program decisions, and other events contribute to the need for the AMWTP. Figure 1.3-1 presents a summary of the *National Environmental Policy Act* (NEPA) activities leading to the AMWTP and explains the relationship between these actions and the proposed action. Recent key events are described in more detail in the following sections.

In the *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement* (SEIS-II), DOE identified its need to dispose of TRU waste generated by past, present, and future activities in a manner that protects public health and the environment (DOE 1997d). The only site that may accept TRU wastes for disposal is WIPP, located near Carlsbad, NM. TRU waste shipped to WIPP for disposal must meet the WIPP WAC, which are regulatory-based. Virtually all of INEEL's TRU waste must be treated to meet the WIPP WAC; for some TRU wastes, treatment consists of only repackaging the waste. The WIPP WAC were first developed in 1989 and revised several times, most recently in 1996. These criteria govern the form, packaging, and transport of TRU waste to be disposed of at WIPP. These criteria also address WIPP operations and safety requirements, transportation requirements, waste package requirements, RCRA requirements, and performance assessment requirements. Overall, they consolidate the minimum requirements of all laws, regulations, and DOE internal requirements that apply to TRU waste transportation and disposal and establish specific minimum waste characteristics which TRU waste must meet before it can be accepted and emplaced at WIPP.

The WIPP WAC establish the conditions that govern the physical, radiological, and chemical composition for TRU waste, setting weight, thermal, and radiological limits. Weight limits are established for TRUPACT-II containers, contact-handled (CH) TRU waste drums, and shipments so that highway weight limits are not exceeded. Thermal power limits, which define the amount of heat that may be produced by radioactive decay, are established for waste containers to limit the concentration of flammable gas which may be generated within the container. Radiological criteria include the maximum plutonium-239 equivalent activity for containers and for stored TRU waste to avoid the potential for nuclear criticality (DOE 1997d).

The AMWTP WAC define the requirements for accepting waste for treatment at the AMWTP facility. These requirements are based on the presently proposed and evaluated design capability of the treatment process described in the Proposed Action. Wastes which do not meet the criteria may be accepted for treatment, but only following a detailed case-by-case evaluation of the specific waste characteristics, and special authorization. It should be noted that the AMWTP WAC are for receipt of wastes for treatment, and not for outgoing, treated wastes. Treated wastes will meet the WAC for the respective disposal site. The AMWTP WAC are presented in Appendix F of this document.

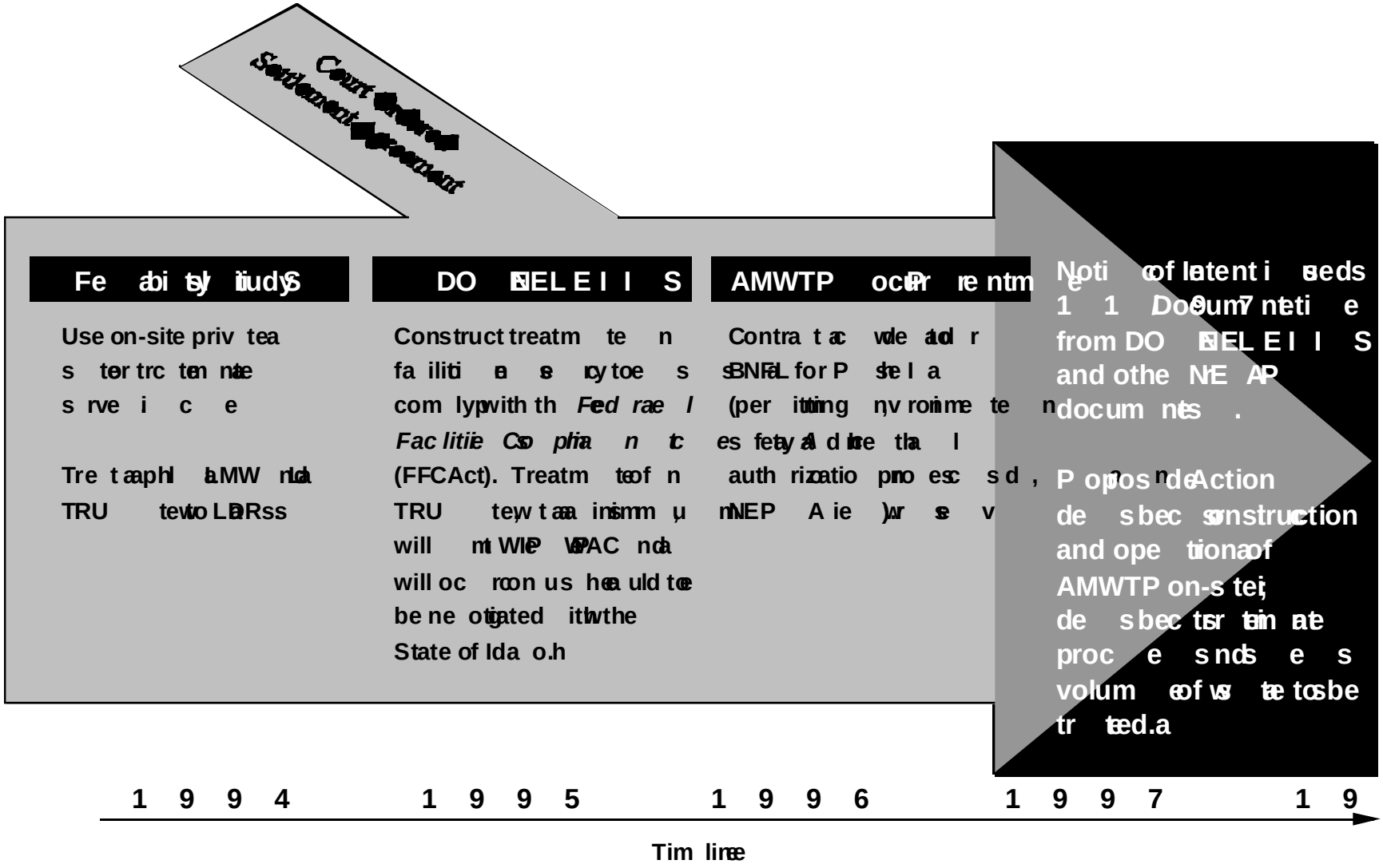

Figure 1 3-1. Decisions leading to the execution of the A WMT EPS .

The waste stored at the RWMC consists of intermingled alpha LLMW and TRU waste. DOE's proposed approach is not to separate the wastes but to co-process the wastes to meet the WIPP WAC. There is currently no designated disposal site for alpha LLMW in storage at the INEEL. To be eligible for disposal at any other site, should one be identified in the future, the alpha LLMW would have to be treated to meet RCRA Land Disposal Restriction (LDR) requirements or the Environmental Protection Agency (EPA) would have to grant an exemption. The WM PEIS assumed that LLMW disposal facilities would be designed to meet all applicable RCRA disposal requirements, including LDRs. When WIPP receives a RCRA Part B mixed waste disposal permit, DOE would reconsider the need to retain the LDR treatment capability.

The treatment and disposal of INEEL alpha LLMW and TRU waste were evaluated in the *Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Final Environmental Impact Statement* (DOE INEL EIS). In May 1995, DOE issued a Record of Decision (ROD) for the DOE INEL EIS. In the ROD, DOE decided that the INEEL would construct treatment facilities necessary to comply with the FFCAct. DOE also decided to treat TRU waste to meet the WIPP WAC at a minimum; this treatment will occur on a schedule to be negotiated with the State of Idaho.

On October 17, 1995, the State of Idaho, the Department of the Navy, and DOE settled the case of *Public Service Co. of Colorado v. Batt*, Civil No. CV 91-0035-S-EJL (D. Idaho) (Lead case). Certain conditions of the Settlement Agreement/Consent Order obligated DOE to:

- Commence procurement of a treatment facility at the INEEL for the treatment of LLMW, alpha LLMW, and TRU waste, and

- Execute a procurement contract for a treatment facility by June 1, 1997, complete construction of the facility by December 31, 2002, and commence operation by March 31, 2003.

Also, the INEEL STP, negotiated with the State of Idaho in accordance with the FFCAct, includes a schedule for constructing treatment capacity for the alpha LLMW and TRU waste, which is consistent with the milestones in the Settlement Agreement/Consent Order. In accordance with the Settlement Agreement/Consent Order and STP, DOE conducted a procurement for a facility to treat the wastes described above. Upon completion of the procurement process and the preparation of an environmental critique under DOE's NEPA Implementing Procedures at 10 CFR 1021.216, DOE executed a phased contract with BNFL. If, after completing this EIS, DOE decides not to proceed with construction of the AMWTP, the contract would be terminated.

1.4 The Proposed Advanced Mixed Waste Treatment Project

The contract between DOE and BNFL has three phases. Phase I involves information-gathering, permitting, and planning activities by BNFL and the preparation of this EIS by DOE. Phase II involves the construction and Phase III the operation of the AMWTP. Phases II and III would occur only if, after the completion of this EIS, DOE decides to proceed with the project. The contract is described in more detail in Appendix F.

The completion of Phases II and III is the Proposed Action. Under the Proposed Action, BNFL would construct and operate a facility which would be capable of treating LLMW, alpha LLMW, and TRU waste, according to the treatments required by the WIPP WAC and LDRs. By 2015, the facility would treat the 65,000 cubic meters of waste that is in temporary storage at the INEEL. Additional quantities of similar waste could also be treated. Under the Proposed Action, the AMWTP facility may treat up to 120,000 cubic meters of additional DOE waste from the INEEL or other DOE sites, for a total of 185,000 cubic meters. Treatment of 185,000 cubic meters would require the operation of the facility for approximately 30 years, or until 2033.

The AMWTP facility would be located at the RWMC in the southwestern corner of the INEEL and would be positioned on the southern portion of the 56-acre RWMC TSA, between the existing TSA RE to the west and the seven RCRA Type II storage modules to the east (EG&G Idaho 1988). The RWMC in its entirety comprises about 163 acres. The proposed location of the AMWTP would avoid movement of retrieved waste across public roads because the waste which would be retrieved is stored in the TSA RE (adjacent to the site identified for the AMWTP facility). The waste that would be processed through the AMWTP facility would be: (1) retrieved from covered storage; (2) characterized for storage and treatment; (3) stored in preparation for treatment; (4) pretreated if necessary; (5) treated to meet applicable storage/disposal WAC and/or LDR requirements, as applicable; and (6) certified for shipment to WIPP or other appropriate disposal facility (BNFL 1997). The proposed location of the AMWTP facility in the RWMC is shown in Figure 1.4-1. The AMWTP would employ thermal treatment processes (currently proposed are incineration and vitrification) on a fraction of the waste volume, while supercompaction and macroencapsulation, as proposed, would constitute the primary non-thermal treatment technologies for the majority of the remaining waste volumes.

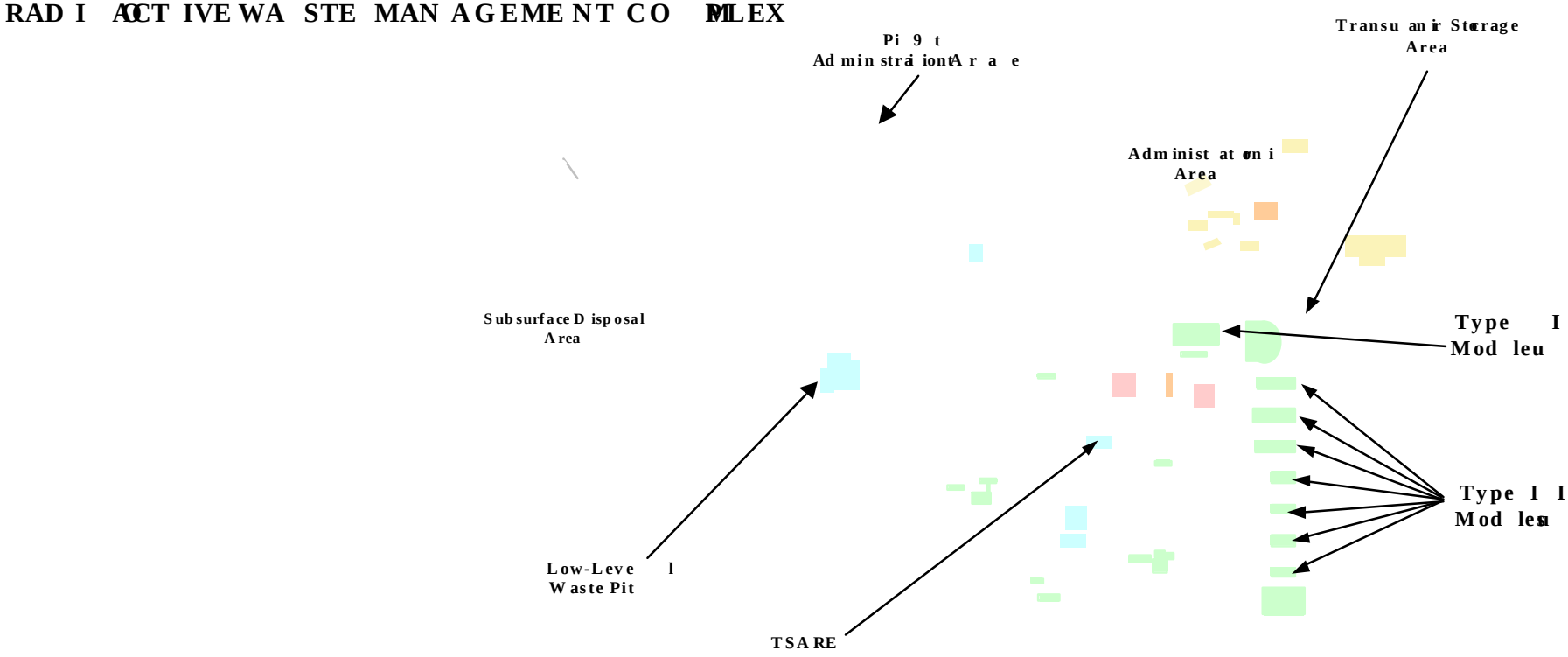

Figure 1.4-1. Layout of the Radioactive Waste Management Complex.

1.5 Relationship of this Environmental Impact Statement to Other Department of Energy *National Environmental Policy Act* Documents

Since 1992, DOE has prepared a number of EISs and environmental assessments (EAs) that provide environmental consequence analyses relevant to the Proposed Action. These detailed evaluations include the DOE INEL EIS, the WM PEIS, SEIS-II, and the *Environmental Assessment: Retrieval and Re-Storage of Transuranic Storage Area Waste at the Idaho National Engineering Laboratory* (TSA EA).

The ROD for the DOE INEL EIS implements the preferred alternative, which is the Modified Ten-Year Plan (Modified Alternative B), for the INEEL environmental restoration and waste management programs. Volume 2 of the DOE INEL EIS includes analysis of the potential environmental impacts associated with treating alpha LLMW and TRU waste and packaging the waste for shipment to a DOE-approved repository. The DOE INEL EIS evaluated two conceptual treatment facilities: the Private Sector Alpha Contaminated Low-Level Waste Treatment Facility and the Idaho Waste Processing Facility. Identical except for how they would be funded and administratively operated, both treatment facility concepts would employ thermal (incineration) and non-thermal treatment processes to meet regulatory requirements and WAC of a disposal site. Within the preferred alternative was the possible receipt of LLMW and TRU waste from other sites, depending upon consent orders negotiated under the FFCAct and decisions made from the WM PEIS. The LLMW and TRU waste would be treated, with the residue returned to the original site or shipped to an approved offsite disposal facility, depending on arrangements reached under the FFCAct with the State of Idaho and other affected states. Commensurate with the current AMWTP Proposed Action, the DOE INEL EIS evaluated the environmental consequences of operating a private sector alpha LLMW and TRU waste treatment facility at the INEEL and also offsite. Analyses conducted for the DOE INEL EIS indicate that normal operations under the preferred alternative (i.e., treatment of waste to render it more environmentally safe and stable in the long-term) would produce only short-term, minor increases in radionuclide and criteria pollutant emissions. Furthermore, analyses indicated that these short-term increases in emissions would be well within current regulatory limits.

The WM PEIS is consistent with the preferred alternative stated in the DOE INEL EIS in which DOE states a preference for the INEEL to serve as a regional treatment facility for TRU waste from other DOE sites (DOE 1997c). The WM PEIS evaluated the INEEL for potential impacts under all of the alternatives that identified a role for the INEEL, including regional treatment of LLMW and TRU waste. According to the WM PEIS TRU ROD (DOE 1998a), DOE will develop and operate mobile and fixed facilities to characterize and prepare TRU waste for disposal at WIPP. Each of DOE's sites that has, or will generate, TRU waste will, as needed, prepare and store its TRU waste on site, except that the Sandia National Laboratory-New Mexico will transfer its TRU waste to Los Alamos National Laboratory in New Mexico. In accordance with future decisions discussed in the ROD, DOE may decide to transfer TRU wastes from sites where it may be impractical to prepare them for disposal to sites where DOE has or will have the necessary capability. The sites that could receive such shipments of TRU waste are the INEEL, Hanford Site, Oak Ridge Reservation, and Savannah River Site. However, any future decisions regarding transfers of TRU waste would be subject to appropriate NEPA review, and to agreements, such as those between DOE and states, relating to the treatment and storage of TRU waste. RODs for the four other waste types (i.e., LLMW, low-level waste, high-level waste, and hazardous waste) analyzed in the WM PEIS have not been issued as of this date.

SEIS-II provides information on environmental impacts associated with DOE's proposed disposal operations at WIPP (DOE 1997d). The SEIS-II was prepared to assess the potential impacts of continuing

the phased development of WIPP as a geologic repository for the safe disposal of TRU waste. SEIS-II evaluates the impacts resulting from the various treatment options; the transportation of TRU waste to WIPP using trucks, a combination of truck and regular rail service, and a combination of truck and dedicated rail service; and the disposal of this waste in the repository. Under the decision described in the SEIS-II ROD (DOE 1998b), DOE will dispose of 175,600 cubic meters of post-1970 defense TRU waste (except PCB-commingled TRU waste), which falls within the capacity limits specified in the *WIPP Land Withdrawal Act* (Public Law 102-579). Furthermore, TRU wastes bound for WIPP would be treated as necessary to meet the planning basis WIPP WAC, Revision 5 (DOE 1996c). Based upon the DOE Complex's TRU waste inventory volume and the anticipated emplacement rate, TRU waste will be disposed of at WIPP over a 35-year period.

In the TSA EA, DOE examined the environmental impacts associated with retrieval and re-storage of the stored TRU waste at INEEL's RWMC. The Proposed Action included construction and operation of the TSA RE (over TSA Pads 1, 2, and R) (see Figure 1.4-1); construction of the Waste Storage Facility (WSF); construction of support facilities (including an Operations Control Building); and upgrades to the RWMC fire water, potable water, power, fencing, and sewage utilities. The purposes of the Proposed Action were (1) to prevent or delay possible deterioration of TSA waste containers to decrease the probability of future environmental contamination and (2) to bring the TSA waste storage facilities into compliance with RCRA and the State of Idaho's *Hazardous Waste Management Act* requirements. DOE NEPA reviews related to the AMWTP are listed in Table 1.5-1.

Table 1.5-1. NEPA reviews related to the AMWTP decision.

Description of action	Status	EIS	EA
Final Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste (WM PEIS)	ROD for TRU waste issued January 1998, additional RODs to follow	X	
Final Supplemental Environmental Impact Statement for the WIPP	ROD issued June 1990	X	
WIPP Disposal Phase Final Supplemental Environmental Impact Statement (SEIS-II)	ROD issued January 1998	X	
DOE Programmatic Spent Nuclear Fuel Management and INEL Environmental Restoration and Waste Management Programs Environmental Impact Statement (DOE INEL EIS)	ROD issued May 1995	X	
Low-level and Mixed Waste Processing at the Waste Experimental Reduction Facility	Finding of No Significant Impact (FONSI) issued June 1994		X
Retrieval and re-storage of TSA waste at the INEL (TSA EA)	FONSI issued May 1992		X
Waste Characterization Facility	FONSI issued March 1995		X

1.6 Public Scoping

1.6.1 Public Scoping Process

DOE published the Notice of Intent (NOI) to prepare an EIS for the AMWTP in the *Federal Register* on November 20, 1997 (62 FR 62025). The public scoping period began on that day and continued through January 9, 1998. DOE invited the public to submit comments during the scoping period by postal mail, e-mail, or fax. Additionally, to increase awareness and understanding of the Proposed Action, DOE held two facilitated public scoping workshops. The workshops provided the public with an opportunity to hear presentations, ask questions, participate in small-group discussions, and submit written and/or verbal comments on the scope of this EIS.

Forty-six attendees signed in at the Boise, Idaho, workshop held December 4, 1997, and 20 attendees signed in at the Idaho Falls, Idaho, workshop held December 9, 1997. The workshop participants submitted 55 of the 127 comment submittals received by DOE during the public scoping period.

State agency representatives, members of interested groups, and private individuals attended these workshops and submitted comments on the scope of the EIS. The following signed in at a workshop or were present at a briefing on the Proposed Action:

- Current DOE and INEEL employees
- Contractor representatives
- Coalition 21
- Area elementary and secondary school students
- Snake River Alliance
- Greater Idaho Falls Chamber of Commerce
- Media
- State of Idaho INEEL Oversight Program representatives
- INEEL Citizens Advisory Board members
- DOE Headquarters personnel
- Elected officials and their representatives
- Department of Interior representatives
- Members of the Shoshone-Bannock Tribes
- Nonaffiliated individuals

1.6.2 Results of Public Scoping

For purposes of tracking and analysis, all comments received were categorized and organized into a database. The categories of comments received are summarized below.

Commentors asked that the EIS fully describe the impacts of operating the proposed facility on air, water, soil, and vegetation. Commentors also asked DOE to analyze the impacts of normal and off-normal facility operations and identify environmental releases under the four treatment components of the Proposed Action. Commentors suggested further that the EIS include a characterization of the treated waste form and asked that DOE examine a wider range of storage and disposal options for the treated waste.

Some commentors made specific suggestions or posed general questions concerning various aspects of the Proposed Action. For example, they asked that DOE Idaho Operations Office (DOE-ID) fully characterize all waste planned for treatment in the proposed facility and that DOE include in the EIS inventories and descriptions of all waste within the DOE Complex that might be candidates for treatment at the proposed facility. DOE was asked that this EIS describe in detail the proposed treatment technologies

as well as other candidate technologies that may potentially be effective but are not proposed. Commentors also requested information about follow-on uses that might be made of the proposed facility, and several asked DOE to disclose its plans to treat waste from other DOE sites, foreign countries, or utilities.

Some commentors questioned the need for the AMWTP while others opposed portions of the Proposed Action, such as employing incineration as a treatment technology. In several cases, commentors requested that the AMWTP EIS include a description of the State and Federal regulatory framework under which the proposed facility would be constructed and operated.

Finally, a few comments were received that relate to the economic and employee impacts of siting the proposed facility at the RWMC, ensuring the safety of the incineration process and resulting emissions, limiting the scope of the analysis within the AMWTP EIS, and radiological safety and control features to be included in the proposed facility design.

In the NOI, DOE identified two alternatives for analysis in the EIS. These were (1) the Proposed Action, under which DOE would allow BNFL to proceed with the construction and operation of the treatment facility and (2) the No Action Alternative, required by Council on Environmental Quality (CEQ) NEPA regulations. During scoping, the public asked that DOE analyze several additional alternatives in this EIS. In response, DOE added two new alternatives: treatment by non-thermal technologies only, followed by shipment of the treated waste offsite (referred to in this EIS as the Non-Thermal Treatment Alternative); and fully treat the waste but retain it at the INEEL as a contingency in the event WIPP is unable to receive and dispose of INEEL waste (known as the Treatment and Storage Alternative). Chapter 3 contains descriptions of each of the alternatives analyzed in this EIS.

Some commentors requested analysis or information that DOE considers to be outside the scope of this EIS. An example is a request that the EIS report on industry waste minimization and storage practices. Industry practices in these areas cover a very broad range and would have no direct bearing on the analysis of the environmental impacts of the Proposed Action or alternatives analyzed in this EIS. A related request, however, that the document include a discussion of industry treatment practices, is relevant to this EIS because the proposed facility would be operated by a private concern and use treatment technologies used in private industry.

Some commentors requested analyses more appropriately conducted or already included in other DOE NEPA documents. Examples of these requests include: (1) analyze the impacts of the transportation of treated waste from the INEEL to WIPP (this is analyzed in SEIS-II); (2) analyze the impacts of transportation of waste from other DOE sites to the INEEL for treatment, and the return of treated waste to the originator (this was analyzed in the WM PEIS and DOE INEL EIS); and (3) provide detailed inventories and descriptions of existing waste within the DOE Complex which might eventually be brought to the INEEL for treatment (descriptions of DOE waste streams, waste characteristics, quantities, and locations are included in the WM PEIS).

Some commentors requested that analyses be conducted that DOE considers to be unnecessary to accomplish the purpose of the AMWTP EIS. Among these were requests that DOE (1) compare the proposed incineration technology with that used in Germany, (2) analyze the variety of waste treatment methods being used throughout the Complex at sites preparing waste for disposal at WIPP, (3) consider contingencies in the event privatization funding fails to materialize in future years or that WIPP does not open on schedule, (4) include cost and budget analyses, and (5) include privatization background.

Copies of related reference materials have been placed in the AMWTP EIS technical library, located in Idaho Falls, Idaho.

1.7 Content of the Environmental Impact Statement

By addressing the following issues, this EIS provides a comprehensive assessment of reasonably foreseeable consequences from the Proposed Action and reasonable alternatives:

- Potential effects on the Snake River Plain Aquifer
- Effects of emissions and discharges from the thermal treatment of LLMW, alpha LLMW, and TRU waste
- Potential effects on the public and workers from exposure to radiological and hazardous materials, during normal operations and from reasonably foreseeable accidents
- Potential effects on air, soil, and water quality, from normal operations and reasonably foreseeable accidents
- Potential effects on members of the public, including minority and low-income populations, from normal operations and reasonably foreseeable accidents
- Pollution prevention, waste minimization, and energy and water use reduction technologies to eliminate or reduce use of energy, water, and hazardous substances, and to minimize environmental impacts
- Potential socioeconomic impacts, including potential impacts associated with the number of workers needed for operations
- Potential impacts on cultural and historic resources
- Regulation of commercial operations on a DOE site
- Compliance with applicable Federal, State, and local requirements including the Settlement Agreement/Consent Order
- Potential cumulative environmental impacts of all past, present, and reasonably foreseeable future operations at the INEEL
- Potential irreversible and irretrievable commitment of resources and the ultimate use of INEEL land
- Potential environmental impacts, including long-term risks to humans, associated with constructing, operating, and decommissioning the AMWTP